



BRASS ENSEMBLE

SYMPHONY SERIES



Manual



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Software version: 1.0 (07/2015)

Special thanks to the Beta Test Team, who were invaluable not just in tracking down bugs, but in making this a better product.

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1 Welcome to the SYMPHONY SERIES

Thank you for purchasing SYMPHONY SERIES BRASS ENSEMBLE. This document will give you information about the library, as well as step-by-step instructions and advice on how to achieve the best results with it.

We hope that you will enjoy using the SYMPHONY SERIES products.

1.1 Manual Conventions

This manual uses particular formatting to point out special facts and to warn you of potential issues. The icons introducing the following notes let you see what kind of information is to be expected:



Whenever this exclamation mark icon appears, you should read the corresponding note carefully and follow the instructions and hints given there if applicable.



This light bulb icon indicates that a note contains useful extra information. This information may often help you to solve a task more efficiently, but does not necessarily apply to the setup or operating system you are using; however, it's always worth a look.

Furthermore, the following formatting is used:

- Text appearing in (drop-down) menus (such as *Open...*, *Save as...* etc.) and paths to locations on your hard drive or other storage devices is printed in *italics*.
- Text appearing elsewhere (labels of buttons, controls, text next to checkboxes, etc.) is printed in **light blue**. Whenever you see this formatting applied, you will find the same text appearing somewhere on the screen.
- Important names and concepts are printed in **bold**.
- ▶ Single instructions are introduced by this play button type arrow.
- Results of actions are introduced by this smaller arrow.

Naming Convention

Throughout this document, we will refer to SYMPHONY SERIES BRASS SOLO as just BRASS SOLO.

1.2 About this Document

This document was written in a way that allows you to access information out of order. While the topics are structured to guide you through the features and usage of BRASS ENSEMBLE topic by topic, you can skip ahead at any time.

Jump right in the midst of the document to a topic you're interested in. You shouldn't have to look up related information to be able to follow any of the workflow tutorials. All relevant information is given as part of each description.

1.3 About the SYMPHONY SERIES of Products

SYMPHONY SERIES BRASS ENSEMBLE is part of the SYMPHONY SERIES of KONTAKT Instruments. This series supplies composers with a comprehensive tool set for creating highly realistic orchestral productions with an expansive sound full of character.

BRASS ENSEMBLE allows you to use a production-ready **STEREO** mix or create your own mix from **CLOSE**, **MID** and **FAR** microphone positions. On the dedicated Mixer page, a parametric **EQ**, convolution **REVERB**, **COMPRESSION** and **FILTER** effects let you adjust the sound to suit any project you're working on.

Articulations from a comprehensive palette can be switched in real time by freely assignable **Key Switches** or **MIDI CCs**. Five performance controls are pre-assigned to MASCHINE controllers and the KOMPLETE KONTROL S series of keyboards.

2 Choosing the Right KONTAKT Instrument

BRASS ENSEMBLE ships with a total of 25 KONTAKT Instruments (**.nki files**). To help you select the right one for your specific task, here is an overview of the included Instruments.

Four Instrument Sections

Musicians from four instrument sections were recorded:

- Horns
- Trombones
- Trumpets
- Tubas

For each Section's Instruments, there's a sub folder in KONTAKT's Library Browser.



Instrument Sections in the Library Browser

Six Instruments Per Section

In each of the four Sections, you'll find six KONTAKT Instruments named after the category of Articulations contained within. The Trombones Section, for example, contains the following Instruments:

- Trombones Effects.nki

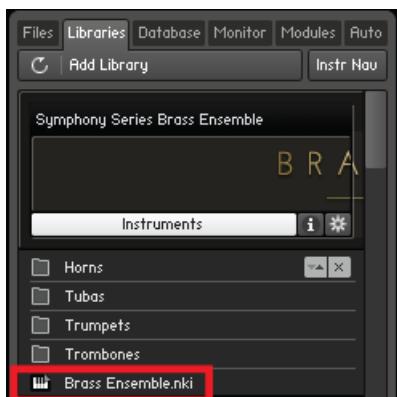
- [Trombones Expression.nki](#)
- [Trombones Legato.nki](#)
- [Trombones Staccato.nki](#)
- [Trombones Sustain.nki](#)
- [Trombones.nki](#) (The Section Master Instrument)



Trombone Articulations in the Trombones Folder

The Ensemble Instrument

In addition to the six Instruments per orchestral section, a single **Brass Ensemble.nki** Instrument is included which combines all Brass Sections in one.



The Ensemble Instrument in the Browser

Now, with such an extensive selection at hand, what is the intended usage of each and which specific KONTAKT Instrument do you choose in a given situation?

2.1 Section Master Instrument

For each orchestral section, BRASS ENSEMBLE offers one KONTAKT Instrument which lets you switch in real time between the Articulations most commonly used in contemporary composition. This Instrument is the quickest and most flexible choice, which you will want to include in your default template for compositional work.

The Master Instruments can be found in each instrument section's sub folder and are named after the instrument section:

- [Horns.nki](#)
- [Trombones.nki](#)
- [Trumpets.nki](#)
- [Tubas.nki](#)

The Section Master Instruments are optimized for **low memory and CPU consumption**. In order to achieve this level of efficiency, a few compromises had to be made:

- No time stretching is available.

- Legato emulation is less advanced than the dedicated Legato instrument.
- No Effects Articulations are included.

To put this into perspective, these are the Articulations which actually are included in the Master Instrument:

- Sustains (including legato emulation)
- Staccatos
- Expressions

2.2 Individual Articulation Instrument

For each orchestral section, BRASS ENSEMBLE offers five KONTAKT Instruments, which offer an extensive selection of Articulations and let you achieve the highest degree of realism. Use these whenever saving computer resources isn't a concern.

The **Individual Articulation Instruments** offer all the Articulations of the Master Instrument plus Instruments for [Effects](#) and [Legato](#) (including note transition samples for true legato). The Individual Instruments are named accordingly:

- Horns Effects.nki
- Horns Expression.nki
- Horns Legato.nki
- Horns Staccato.nki
- Horns Sustain.nki

2.3 Ensemble Instrument

The **Ensemble Instrument** allows you to play **all brass sections in one Instrument**, although with a limited choice of Articulations.

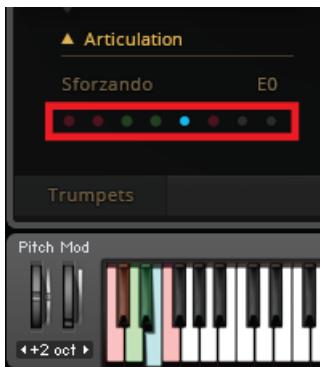
It distributes voices between the different sections (according to **user-configurable Section note ranges**) for rapid sketching of musical ideas for the entire brass ensemble. It represents the quickest way of distributing chords across Sections, playing Ensemble swells or massive orchestral stabs.

Inside the Ensemble Instrument, you can adjust volume and panorama per Section, as well as the note range which is played by each of them.

3 Playing SYMPHONY SERIES Instruments

3.1 Selecting Articulations with Key Switches

When loading one of the KONTAKT Instruments, up to 8 Articulations are assigned to the keys from C0 to G0. These key-switches are displayed as either red, green, cyan or purple keys in KONTAKT's on-screen keyboard and in the small Articulation Indicators beneath the [Articulation](#) label.



Key Switch colors on the on-screen keyboard and the Articulation Indicators



If BRASS ENSEMBLE is configured to select Articulations by Key Switches, the corresponding keys in KONTAKT's on-screen keyboard are colored according to the respective Articulation category:

Red: Sustain

Green: Staccato

Blue: Expression

Purple: Effects



On KOMPLETE KONTROL S keyboards, the Light Guide LEDs visualize the Key Switches by lighting up in the same color.

To select an Articulation by Key Switch:

1. Load the [Trombones.nki](#) KONTAKT Instrument.
2. Press the CO MIDI note on your MIDI keyboard to select the [Sustain All](#) Articulation assigned to CO.
3. Play this Articulation using the dark blue range of keys.
4. Press the DO key on your MIDI keyboard to select the [Blast FFF](#) Articulation.
5. Play this Articulation using the dark blue range of keys.



KONTAKT's on-screen keyboard with Key Switches



None of these Articulations are just static musical building blocks. Make a habit of using the Modulation Wheel (MIDI CC 1) to modulate the [Dynamics](#) control to record expressive parts.

In the context of a busy arrangement, these results may already be good enough. In passages which feature the brass more prominently, the discerning listener may still be able to identify details which give away the fact that you didn't record a live orchestral performance.

The solution is to refine the recorded performance in your host software with the provided Performance Controls.

3.2 Refining a Recording in Your Host Software

The key to a realistic performance is a combination of three basic methods:

Switching Between Articulations

Articulations are one of the key ingredients of musical expression. Switching Articulations in BRASS ENSEMBLE is **the equivalent to writing articulation marks** in music notation. When composing with BRASS ENSEMBLE, lay out carefully which Articulations you will need.

Playing Like a Brass Player

Watch both, the note starts and endings. Depending on the pitch and instrument section, it takes real-life brass instruments varying amounts of time to build up a steady tone (i.e. [Attack](#)) and to fade out (i.e. [Release](#)). These differences were recorded and are part of the Instruments.

Unlike playing a piano library, to achieve accurate timing, you will have to move some notes ahead of the precise beat by varying amounts, just as real brass players compensate by playing slightly ahead.

Using the Performance Controls

Real time modulation of Performance Controls allows for more realistic performances. Recording automation with the **Mod Wheel** allows you to access the entire dynamic range of the orchestra.



The Mod Wheel (MIDI CC 1) is by default assigned to the Dynamics control and you should always play expressively with the tonal variations the Mod Wheel affords you.

You can achieve even more realistic results by automating slight variations to the [Attack](#), [Release](#), [Tightness](#) and [Motion](#) controls, even if the differences appear subtle at first.

3.3 About Using MIDI Controllers

It is highly recommended that you work with a MIDI controller, which lets you perform automation of the Performance Controls in real time. This way, you will **hear the changes immediately**, instead of just drawing automation curves in your host software.

If you load BRASS ENSEMBLE inside KOMPLETE KONTROL or MASCHINE 2, the Performance Controls are automatically mapped to the controller's first four knobs. The Dynamics control defaults to the Mod Strip on your KOMPLETE KONTROL S keyboard, or to the Modulation Wheel (MIDI CC 1) if used with a generic controller.

All other parameters are available via your host software's automation system. When selecting the KONTAKT plug-in as the automation target, the Performance Controls are the first four automation parameters.



In order to control the Performance Controls with a generic MIDI control device, please use the mechanism provided by your host to MIDI-control automation parameters.

Cubase: Quick Controls

Logic X: Automation Quick Access

Ableton Live: MIDI Remote

Pro Tools: MIDI CC Automation

3.4 Performance Controls

When you load BRASS ENSEMBLE, the Performance Controls are the most prominent feature of the Instrument's user interface. These controls are used to refine a performance to achieve very realistic results. Thanks to their unified layout, once you understand what they do in one product from the series, you'll be immediately familiar with all of them.



The main Performance Controls

3.4.1 Dynamics

The **Dynamics** control is assigned to the Mod Wheel (MIDI CC 1) by default. It allows you to control the loudness and intensity of the Instrument in real-time. That way, you can play swells in any of the Sustain Articulations or easily automate intensity changes to e.g. transition from leading to supporting passages.

3.4.2 Attack

The [Attack](#) control allows you to increase the fade-in time per note to simulate realistic variations throughout a passage. By setting the [Attack](#) time to higher values, you can cause the notes to fade in more slowly, giving the notes a more solemn and gentle character.

3.4.3 Release

The [Release](#) control applies an additional envelope to the fade-out phase of the notes.

Reducing the [Release](#) setting to 0% produces a very "dry" sounding result, which can sometimes make the result sound artificial. However, this can be very useful when adding internal or external reverb effects, as this allows the additional reverb to avoid conflicting with the natural sampled ambience.

3.4.4 Tightness

The [Tightness](#) control determines the starting point for the playback of a sample. This feature is extremely useful when used in combination with the [Attack](#) control to allow you to cut into the initial transient for an articulation to allow more precise note attacks.



When increasing the [Tightness](#) value to shift playback farther into the sample, it is recommended you increase the [Attack](#) value as well to refine the shape of the note attack.

This control is also useful in the context of playing phrases where the cross-fading of a loud note to the attack of a following quieter note can cause audible artifacts. This should hardly ever occur and if it does, [Tightness](#) is just one option to improve. Usually, adjusting these notes' velocities will be sufficient.

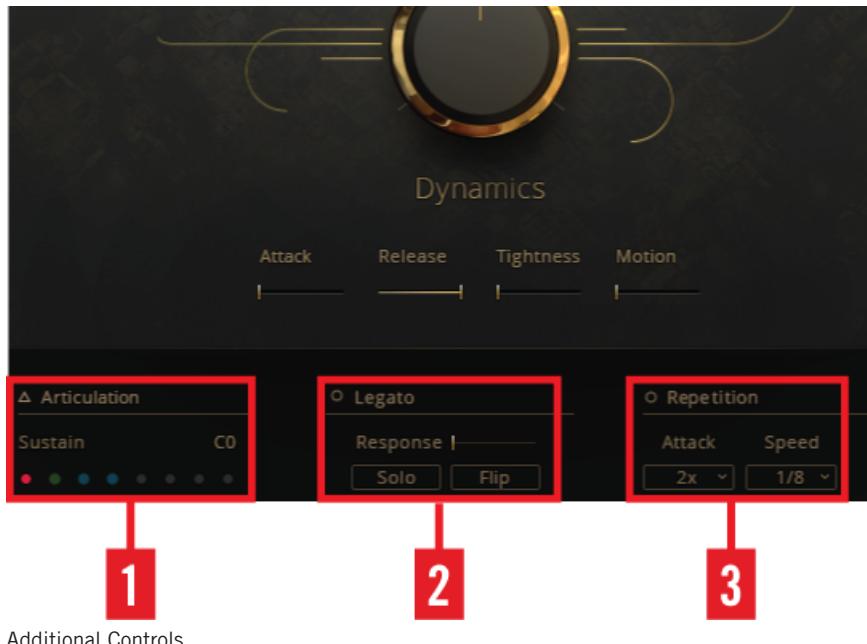
Should the occasion arise and you hear any such artifacts, try increasing [Tightness](#) starting from its default of 0%. By cutting off the natural attack phase, [Tightness](#) simulates the playing behavior of an instrument which is already resonating when playing the next note.

3.4.5 Motion

The [Motion](#) control allows you to add movement to the sound, which modulates both pitch and intensity of the note.

3.5 Additional Controls

Below the Performance Controls, you'll find the [Articulation selector](#) plus two additional sets of controls. Depending on the selected Articulation, different combinations of these controls are available. This is an overview of all controls you will encounter.



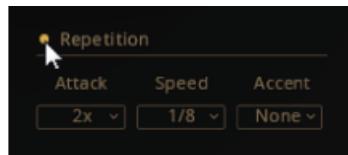
(1) Articulation Selector: This control is visible in every Instrument.

- ▶ Click the [Articulation](#) label to open the [ARTICULATION SLOTS](#) list.
- ▶ Click the Articulation name to assign a different Articulation from the drop-down menu.
- ▶ Click any of the eight Articulation Indicator dots to select a different Articulation.

(2),(3) Additional Controls: Depending on which BRASS ENSEMBLE Instrument you open and which Articulation type you select, these two fields show different controls.

3.5.1 Repetition

Click the small button to the left of the label to activate or de-activate **Repetition**. A thin ring shows it's inactive, a solid dot means it's active.



Repetition Controls with and without Accent

When **Repetition** is activated, every note you play is automatically repeated a number of times before the note plays out to the end.

Attack: Set the number of repetitions here. Click the button and select one of the numbers from the drop-down menu.

- ▶ Select *2x - 4x* for the note to be repeated and then stop.
- ▶ Select *Run* for the notes to be repeated indefinitely.

Speed: Set the speed of repetitions here. Click the button and select a note division value from the drop-down menu.

Accent: This parameter is only available for Staccato Articulations.

- ▶ Select *None* for no pronounced accentuation
- ▶ Select *First* for accentuation of the first repetition. If you selected *Run* in the **Attack** menu, selecting first will accentuate the first note of the repeating pattern.
- ▶ Select *Last* for accentuation of the last repetition. If you selected *Run* in the **Attack** menu, selecting first will accentuate the first note of the repeating pattern.

3.5.2 Legato

Click the small button to the left of the label to activate or de-activate **Legato**. A thin ring shows it's inactive, a solid dot means it's active.



Legato Control Panel

Response: This slider controls the speed of the Legato transition.

- ▶ Click and drag the slider to the left for a longer transition time or to the right for a short transition.

Solo: Click this button to switch between **Solo** and **Duet** voice handling.

- ▶ Select **Solo**: Only one note is played at a time.
- ▶ Select **Duet**: This allows two-part polyphonic legato melodies to be played. While sequential notes are played less than 6 semitones apart, they will be joined together by legato transitions. If notes are played sequentially with 6 or more semitones between them, they will play as two completely independent parallel legato melodies.

Flip: Click this button to switch between **Flip** and **Slur**.

- ▶ Select **Flip**: Legato note changes (e.g. playing and holding C1, then playing D1 with note overlap) are precisely separated.
- ▶ Select **Slur**: Note changes are connected by a continuous pitch change.

3.5.3 Progress Indicator

The **Progress** indicator is only visible for the Expression category of Articulations. The curve from left to right visualizes how the intensity, volume or pitch evolves over time in the selected Articulation, while a pointer indicates the playback position.



Progress Display

3.5.4 Round Robin

Round Robin helps avoid a typical issue associated with repeated playback of a sample. If you play a Staccato pattern using the same sample for each note, the result will sound static and artificial.

With Round Robin activated, there are between 2 and 8 alternative samples available for each note. Playing the first note will trigger sample 1, the second note triggers sample 2 and so on until every sample position has been played, then it starts from the beginning.

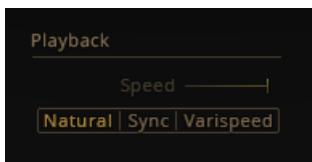
The Round Robin indicator visualizes the selection of the alternative samples, the dot indicating the sample being played back.



Round Robin Indicators

3.5.5 Playback

The Playback parameter is available for Articulations which have a rhythmical aspect like a half tone up movement or a trill.



Playback Controls

Natural: Click to select this option to play back the Articulation at the originally recorded speed. No time stretching is applied.

Sync: Click to select this option to sync the Articulation with your project's tempo. Time stretching is applied.

Varispeed: Click to select this option if you want free control over the playback speed of an Articulation. This is the only mode affected by the **Speed** slider. Time stretching is applied.

Speed: Click and drag left for slow playback of the Articulation, drag right for fast playback.



The Sync and Varispeed controls activate time stretching, which results in increased CPU load and RAM consumption. Only activate if time stretching is required

4 Configuring BRASS ENSEMBLE

Each Instrument in BRASS ENSEMBLE represents a default selection of Articulations assigned to Key Switches. You can configure your own collection of Articulations by means of the [Articulation Slot Setup](#) view as described in this chapter.

Once configured, you can save your work as a KONTAKT Snapshot for instant recall.

4.1 The Articulation Slot Setup View

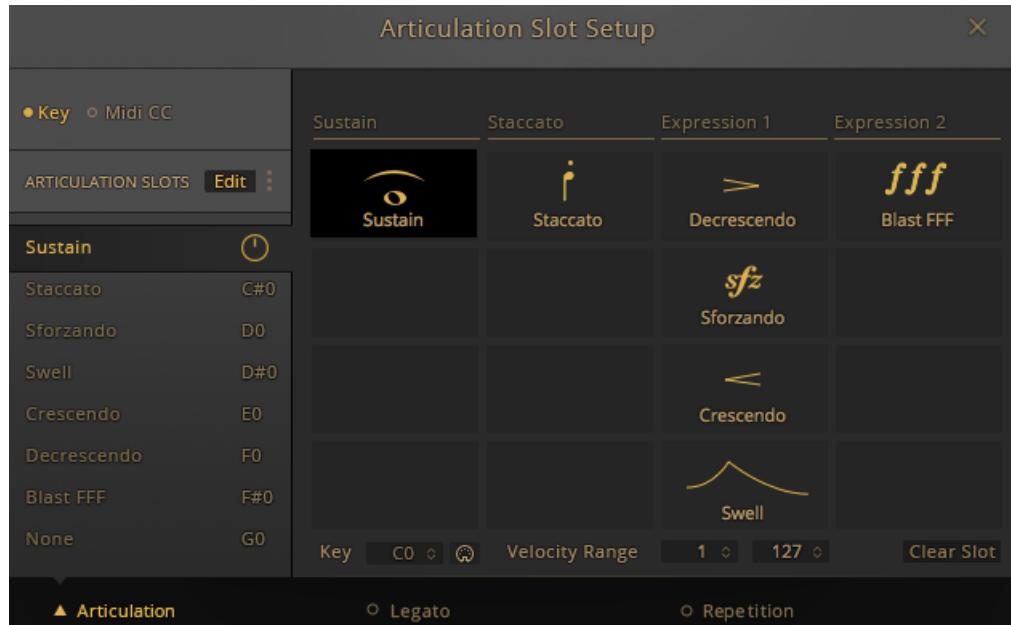
To assign up to eight Articulations to either [Key](#) Switches or value ranges of a [MIDI CC](#), BRASS ENSEMBLE provides the [Articulation Slot Setup](#) view. This is how you access it:

1. Load [Brass Ensemble.nki](#).
2. While in the default Performance view, click the [Articulation](#) label in the bottom left corner. This will open the [ARTICULATION SLOTS](#) list.



Opening the ARTICULATION SLOTS List

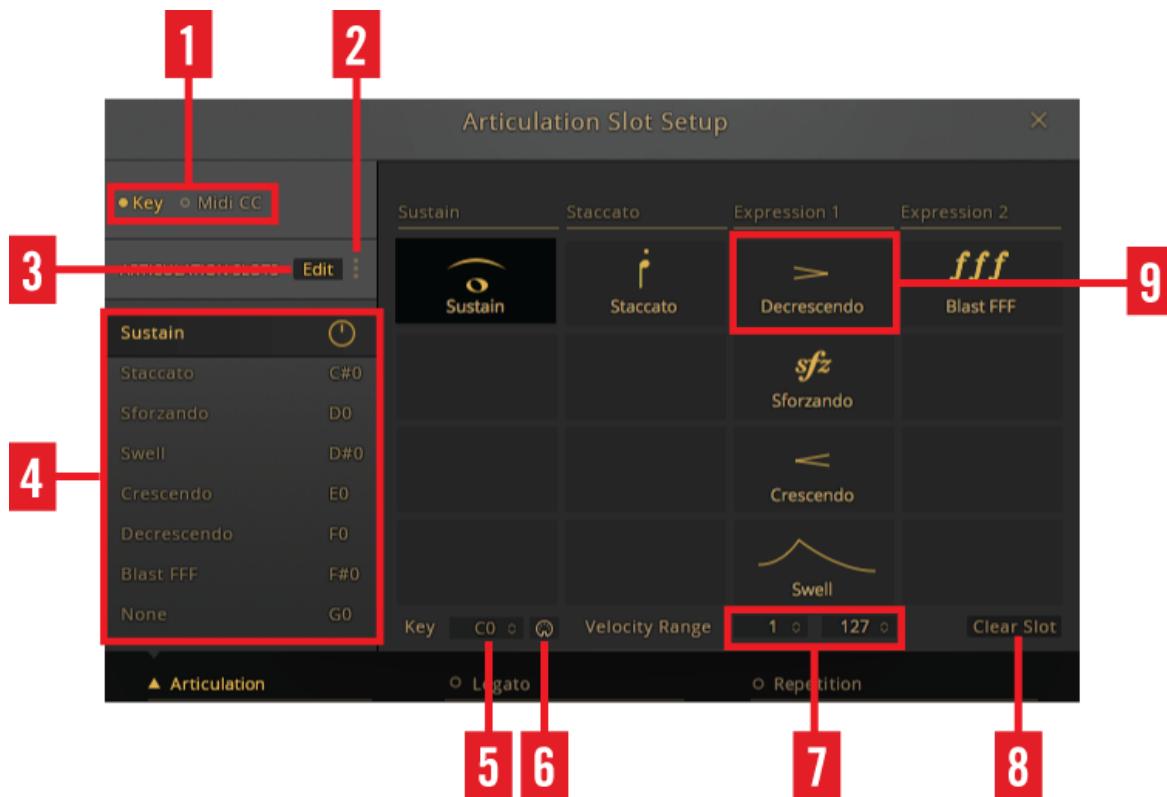
3. Click the [Edit](#) button to open the full [Articulation Slot Setup](#). This view will completely cover the Performance Controls.
- You can now freely configure Articulation assignments.



Articulation Slot Setup View

4.1.1 Overview of the Articulation Slot Setup (Key Switch)

Depending on whether you assign [Key](#) switches or [MIDI CC](#), the [Articulation Slot Setup](#) view offers slightly different sets of controls. This is an overview of the [Key](#) Switch setup.



Articulation Slot Setup view (MIDI Key)

(1) Key/MIDI CC selector: The eight Articulation Slots can be selected either by [Key](#) (MIDI note) or by [MIDI CC](#) events. Click the respective text label to change this setting for the entire Instrument. The active option is highlighted.

(2) Articulation Slot Macros: Click the three dots to open the macro menu. Depending on whether [Key](#) or [MIDI CC](#) is selected, you'll have access to different convenience features (e.g. assigning ascending key switches to the Articulation Slots automatically).

(3) Edit Button: Click this button to show/hide the full [Articulation Slot Setup](#) view.

With [Edit](#) inactive, you have limited access to the Articulation Slots, while still being able to move the Performance Controls with the mouse.

With **Edit** activated, you get full access to **Key/MIDI CC** assignments and a visual representation of selectable Articulations.

(4) Articulation List: This list holds eight Articulation Slots. Each Slot represents a **Key/MIDI CC** value, the assigned Articulation, as well as a volume control per Articulation. **Key/MIDI CC** is set globally for all Articulation Slots in an Instrument.

(5) Key Assignment selector: Set the MIDI **Key** which will select this Articulation. Click and drag up/down to set the **Key**.

(6) MIDI Learn button: This offers an alternative to manually setting the MIDI **Key**. Click this button, then press a key on your MIDI keyboard to complete the assignment.

(7) Velocity Range selector: Multiple Articulations can be assigned to the same MIDI **Key**. The selection is then dependent on how much force you apply when playing that key (Velocity).

- ▶ Click and drag the value in the left field to set the lowest Velocity (0-127) which will select this Articulation.
- ▶ Click and drag the right hand field to set the highest Velocity (0-127) which will select this Articulation.

(8) Clear Slot button: Click this button to remove the Articulation assignment from the selected slot. The samples of unassigned Articulations are automatically purged from RAM. The **Key/MIDI CC** setup is preserved when clicking the Clear Slot button.

(9) Articulation Cell: Each of these cells represent an Articulation. Click any of them to assign that Articulation to the selected Articulation slot.



If BRASS ENSEMBLE is configured to select Articulations by Key Switches, the corresponding keys in KONTAKT's on-screen keyboard are colored according to the respective Articulation category:

Red: Sustain

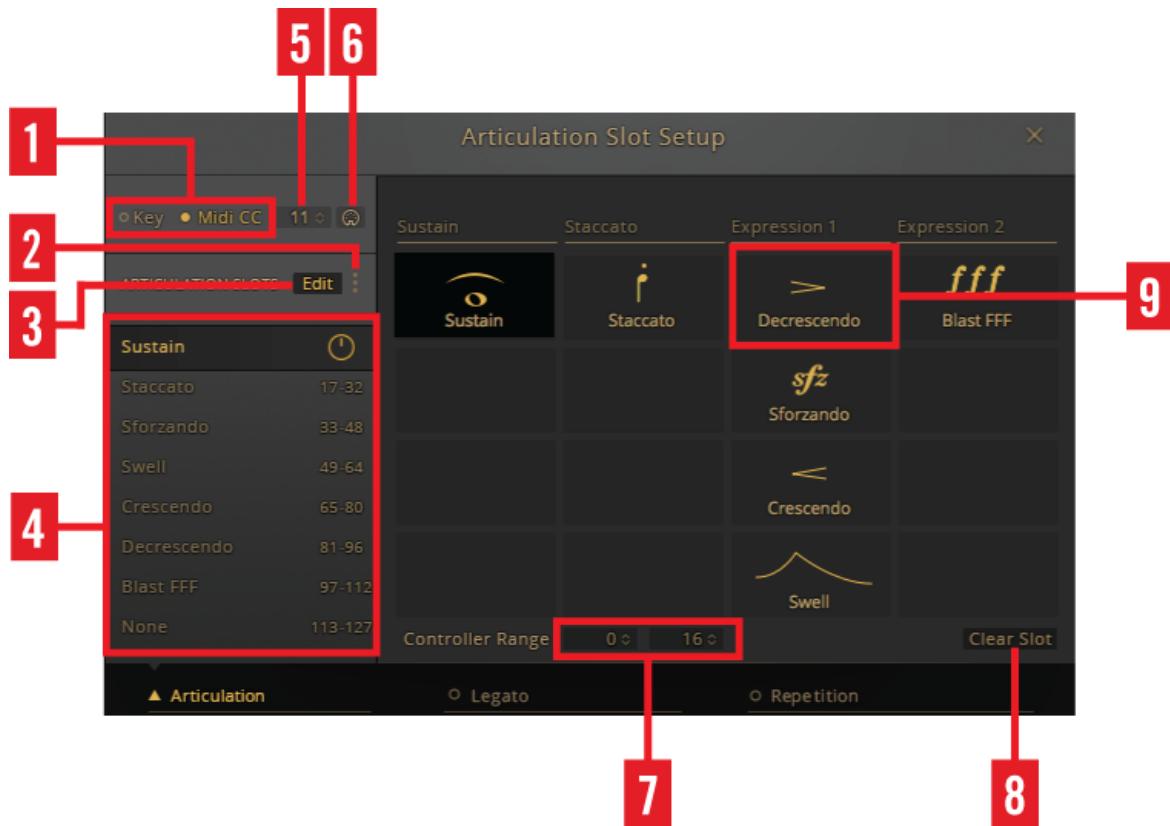
Green: Staccato

Blue: Expression

Purple: Effects

4.1.2 Overview of the Articulation Slot Setup (MIDI CC)

Depending on whether you assign [Key](#) switches or [MIDI CCs](#), the Articulation Slot Setup view offers slightly different controls. This is an overview of the [MIDI CC](#) setup.



Articulation Slot Setup view (MIDI CC)

(1) Key/MIDI CC selector: The eight Articulation Slots can be selected either by [Key](#) (MIDI note) or by [MIDI CC](#) events. Click the respective text label to change this setting for the entire Instrument. The active option is highlighted.

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With [Edit](#) inactive, you have limited access to the Articulation Slots, while still being able to move the Performance Controls with the mouse.

With [Edit](#) activated, you get full access to [Key/MIDI CC](#) assignments and a visual representation of selectable Articulations.

(4) Articulation List: This list holds eight Articulation Slots. Each Slot represents a [Key/MIDI CC](#) value, the assigned Articulation, as well as a volume control per Articulation. [Key/MIDI CC](#) is set globally for all Articulation Slots in an Instrument.

(5) MIDI CC Assignment selector: Click and drag up/down to set the [MIDI CC](#) number.

(6) MIDI Learn button: This offers an alternative to manually setting the [MIDI CC](#) number. Click this button, then move a knob, fader or button on your MIDI keyboard to send a MIDI Control message and to complete the assignment.

(7) Controller Range selectors: Multiple Articulations can be assigned to the same [MIDI CC](#). The selection is then dependent on the [MIDI CC](#) value your controller sends.

- ▶ Click and drag the value in the left field to set the lowest CC value (0-127) which will select this Articulation.
- ▶ Click and drag the right hand field to set the highest CC value (0-127) which will select this Articulation.

(8) Clear Slot button: Click this button to remove the Articulation assignment from the selected slot. The samples of unassigned Articulations are automatically purged from RAM. The [Key](#)/[MIDI CC](#) setup is preserved when clicking the Clear Slot button.

(9) Articulation Cell: Each of these cells represent an Articulation. Click any of them to assign that Articulation to the selected Articulation slot.



If BRASS ENSEMBLE is configured to select Articulations by Key Switches, the corresponding keys in KONTAKT's on-screen keyboard are colored according to the respective Articulation category:

Red: Sustain

Green: Staccato

Blue: Expression

Purple: Effects

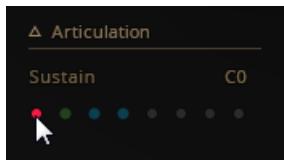
4.2 Editing Articulations Manually

There are different ways for you to re-assign different Articulations to pre-defined Articulation Slots.

Directly in the Performance View

This is the fastest option if you want to assign a different Articulation to the currently selected Articulation Slot. It also allows you to stay in the distraction-free performance view.

1. Load [Brass Ensemble.nki](#).
2. While in the performance view, click the leftmost Articulation Indicator in the bottom left corner. The [Sustain](#) Articulation is selected.



Selecting Articulation Slot 1

3. Click the Articulation name. A list of available Articulations will open.



Selecting an Articulation from the drop-down list

4. Select the **Blast FFF** Articulation by clicking in the list.

→ The Articulation is assigned to CO.

In the Articulation Slots List

Using the **ARTICULATION SLOTS** list gives you an overview of all Articulation assignments while still letting you access the Performance controls with the mouse.

1. Load **Brass Ensemble.nki**.
2. While in the performance view, click on **Articulation** in the bottom left corner. The **ARTICULATION SLOTS** list will open.



Opening the ARTICULATION SLOTS List

3. Select the first Articulation Slot by clicking on it in that list.
4. Click on **Sustain**, the default assignment in the first Articulation Slot. A list of available Articulations will open.
5. Select **Crescendo** by clicking in the list.
→ The **Crescendo** Articulation is assigned to the first slot.

In the Articulation Slot Setup View

The full Articulation Slot Setup view allows you to switch between MIDI **Key** and **MIDI CC** assignment for the entire KONTAKT instrument. Depending on this selection, you can freely configure advanced parameters.

1. Load **Brass Ensemble.nki**.
2. While in the default performance view, click on **Articulation** in the bottom left corner. The **ARTICULATION SLOTS** list will open.
3. In that list, click the **Edit** button. The **Articulation Slot Setup** view will open, covering the Performance Controls.
4. Here, click the **Decrescendo** tile to select the respective Articulation.

- The Decrescendo Articulation is now assigned.



If BRASS ENSEMBLE is configured to select Articulations by Key Switches, the corresponding keys in KONTAKT's on-screen keyboard are colored according to the respective Articulation category:

Red: Sustain

Green: Staccato

Blue: Expression

Purple: Effects

4.2.1 Removing Specific Articulation Assignments

To clear single Articulation assignments, use the ARTICULATION SLOTS list.

1. Load [Brass Ensemble.nki](#).
2. While in the performance view, click on [Articulation](#) in the bottom left corner. The ARTICULATION SLOTS list will open.



Opening the ARTICULATION SLOTS List

3. In the list, click on the Articulation name. A list of available Articulations will open.

4. Select **None**, the last entry in that list.

→ The assignment is removed.

4.2.2 Removing all Articulations

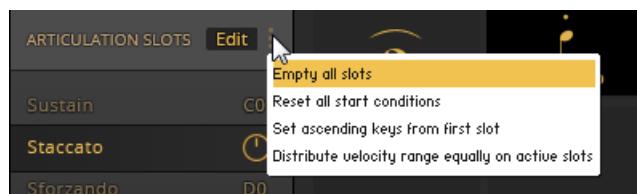
To clear all Articulation assignments, use the Articulation Macro.

1. Load **Brass Ensemble.nki**.
2. While in the default performance view, click on **Articulation** in the bottom left corner. The **ARTICULATION SLOTS** list will open.



Opening the ARTICULATION SLOTS List

3. In the top right corner of this list, click the three vertical dots. A list of available macros will open.



Opening the Articulation Macro List

4. Click on *Empty all slots*.
→ All assignments are deleted.

4.2.3 Assigning Key Switches to Articulations

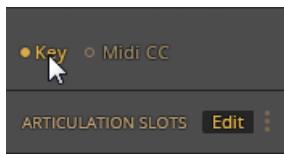
Within a KONTAKT Instrument, you can assign either **Key** switches (MIDI key) or **MIDI CCs** (buttons) to select an Articulation. You can not mix **Key** and **MIDI CC** assignments within one Instrument. This is how you assign a **Key** switch.

1. Load **Brass Ensemble.nki**.
2. While in the default performance view, click on **Articulation** in the bottom left corner. The **ARTICULATION SLOTS** list will open



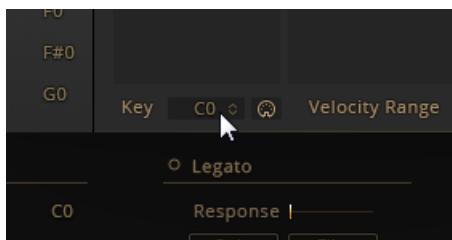
Opening the ARTICULATION SLOTS List

3. Click the **Edit** button in the top right corner of this list. This will open the **Articulation Slot Setup** view.
4. Make sure **Key** is selected.



Key Switches Selected

5. Select the first Articulation slot by clicking in the left hand list.
6. Select the [Sforzando](#) Articulation by clicking the corresponding cell in the [Articulation Slot Setup](#) view.
7. Underneath the Articulations, click on the field labeled [Key](#) and drag up/down to set the MIDI Key to D0.



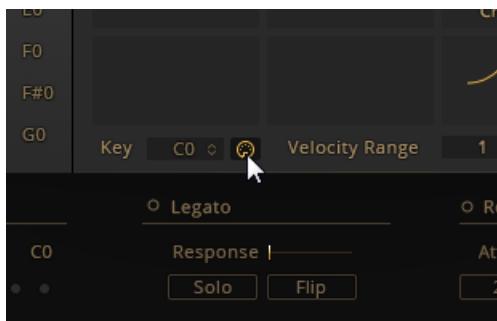
Setting the MIDI Key

- The Articulation is now assigned to D0 on your MIDI keyboard and can be selected by pressing that key.

Assigning the Key via MIDI Learning

As an alternative to setting the MIDI [Key](#) by clicking and dragging the value in the [Key](#) field, you can MIDI-learn the MIDI key.

1. Click the MIDI connector button.



Activating MIDI Learn

2. Press the E0 key on your MIDI keyboard.

→ The selected Articulation is now assigned to E0 on your MIDI keyboard and can be switched on by pressing that key.



If BRASS ENSEMBLE is configured to select Articulations by Key Switches, the corresponding keys in KONTAKT's on-screen keyboard are colored according to the respective Articulation category:

Red: Sustain

Green: Staccato

Blue: Expression

Purple: Effects

4.2.4 Assigning Velocity Ranges to Key Switches

By default, key switch assignments are not sensitive to velocity. You can play the MIDI note on your keyboard softly or with force, as both will activate the same assigned Articulation.

If you need to switch between different Articulations with just one MIDI key, setting up velocity ranges allows you to do just that.

Setting Up the First Articulation

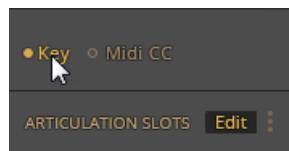
1. Load [Brass Ensemble.nki](#).

2. While in the default performance view, click on [Articulation](#) in the bottom left corner. The [ARTICULATION SLOTS](#) list will open.



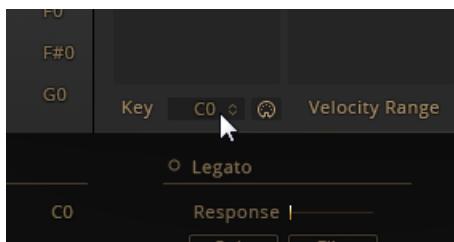
Opening the ARTICULATION SLOTS List

3. Click the [Edit](#) button in the top right corner of this list. This will open the [Articulation Slot Setup](#) view.
4. Make sure [Key](#) is selected.



Key Switches Selected

5. Select the first Articulation slot by clicking in the left hand list.
6. Select the [Crescendo](#) Articulation by clicking the corresponding cell in the [Articulation Slot Setup](#) view.
7. Underneath the [Articulations](#), click on the field labeled [Key](#) and drag up/down to set the MIDI key to C0.



Setting the MIDI Key

- Set the [Velocity Range](#) values to 0 in the left field and 90 in the right hand field.

Setting Up the Second Articulation

1. Select the second Articulation slot by clicking in the left hand [ARTICULATION SLOTS](#) list.
 2. Select the Sustain Articulation by clicking the corresponding cell in the [Articulation Slot Setup](#) view.
 3. Underneath the Articulations, click on the field labeled [Key](#) and drag up/down to set the MIDI key to C0.
 4. Likewise, set the [Velocity Range](#) values to 90 in the left field and 127 in the right hand field.
- You have now configured the C0 key on your keyboard to switch to the [Crescendo](#) Articulation when pressed lightly and to the [Sustain](#) Articulation when pressed with more force.

4.2.5 Assigning MIDI CCs to Articulations

Within a KONTAKT Instrument, you can assign either [Key](#) Switches (MIDI key) or [MIDI CCs](#) (MIDI button) to select an Articulation. You can not mix [Key](#) and [MIDI CC](#) assignments within one Instrument.

Switching by [MIDI CC](#) is different from using [Key](#), because here, you have to set up value ranges, whereas setting up velocity ranges for [key](#) is optional. The reason is that each instance of a BRASS ENSEMBLE Instrument will only receive one [MIDI CC](#) number. So switching Articulations requires you to set up value ranges.

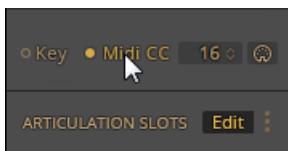
1. Load [Brass Ensemble.nki](#).

2. While in the default performance view, click on [Articulation](#) in the bottom left corner. The [ARTICULATION SLOTS](#) list will open.



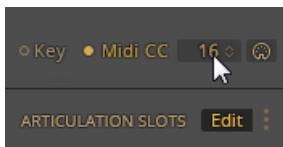
Opening the ARTICULATION SLOTS List

3. Click the [Edit](#) button in the top right corner of this list. This will open the [Articulation Slot Setup](#) view.
4. Make sure [MIDI CC](#) is selected.



MIDI CC Selected

5. Right next to the [MIDI CC](#) switch, click on the field and drag up/down to set the [MIDI CC](#) to [16](#). By default, the available value range of 0-127 is evenly distributed across the eight Articulation slots. Unless your specific setup requires you to change it, it is recommended you keep this default.



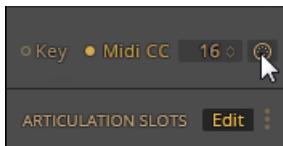
Setting MIDI CC Number

6. Select the first Articulation slot by clicking in the left hand list.
7. Select the **Staccato** Articulation by clicking the corresponding cell in the **Articulation Slot Setup** view on the right.
→ The selected Articulation is now assigned to **CC 16** on your MIDI controller.

Assigning MIDI CC via MIDI Learning

As an alternative to setting the **MIDI CC** by clicking and dragging the value in the **MIDI CC** field, you can **MIDI-learn** it.

1. Click the **MIDI Learn** button next to the **MIDI CC** label.



Clicking the MIDI Learn Button

2. Press a button assigned to **MIDI CC 16** on your **MIDI controller**.
→ The selected Articulation is now assigned to **CC 16** on your **MIDI controller**.

By default, the Articulation in the first Articulation slot can be switched on by sending a CC value between 0 and 15 from your host software or a MIDI controller.

4.2.6 Configuring a Native Instruments Controller to Send MIDI CC

If you own any Native Instruments hardware controller, please use **Controller Editor** to configure the buttons/pads on your controller to send appropriate MIDI CC values as described in the **Controller Editor Manual**.

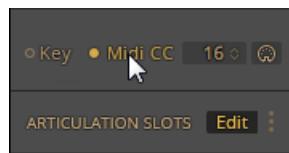
Loading an Instrument and Setting it to Receive MIDI CC

1. Load [Brass Ensemble.nki](#).
2. While in the default performance view, click on [Articulation](#) in the bottom left corner. The **ARTICULATION SLOTS** list will open.



Opening the ARTICULATION SLOTS List

3. Click the [Edit](#) button in the top right corner of this list. This will open the [Articulation Slot Setup](#) view.
4. Make sure [MIDI CC](#) is selected.



MIDI CC Selected

The Articulation Slots are set up to switch when MIDI CC values are received.

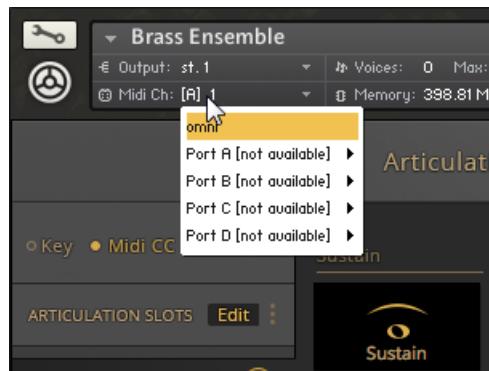
Configuring a Native Instruments Controller to Send MIDI CC Values

In order to select either of the first two Articulation Slots, the controller has to send values within the value ranges assigned to the Articulation Slots. Slot 1 is assigned values from 0 to 16, Slot 2 is assigned values from 17 to 31.

Please set up the following values in **Controller Editor**:

	Hardware Button 1	Hardware Button 2
Type	Control Change	Control Change
Channel	1 ¹	1 ¹
Number	16	16
Mode	Trigger	Trigger
Value	10	26
Action On	Down	Down

¹ Channel 1 is the default for the first Instrument you load in KONTAKT. If you intend to open multiple Instruments within one KONTAKT instance, set the channel which BRASS ENSEMBLE is receiving MIDI events from.



Selecting MIDI Channel

4.2.7 Sending MIDI CC From Your Host Software



Every modern music production software allows you to automate not just track volume and panorama, but also the full spectrum of MIDI messages and plug-in automation parameters. For a more detailed description, please refer to your host's documentation.

Whether you draw MIDI CC automation or record MIDI CC events from a hardware MIDI controller, in order to switch Articulations by [MIDI CC](#), you need to set up BRASS ENSEMBLE to receive [MIDI CC](#) messages:

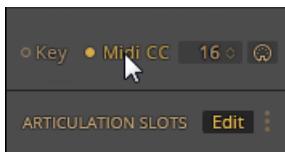
Loading an Instrument and Setting it to Receive MIDI CC

1. Load [Brass Ensemble.nki](#).
2. While in the default performance view, click on [Articulation](#) in the bottom left corner. The [ARTICULATION SLOTS](#) list will open.



Opening the ARTICULATION SLOTS List

3. Click the [Edit](#) button in the top right corner of this list. This will open the [Articulation Slot Setup](#) view.
4. Make sure [MIDI CC](#) is selected.



MIDI CC Selected

Switching Articulations by MIDI CC From Your Host

In order to switch between the first two Articulation slots, write value automation for MIDI CC in your host for a track sending MIDI data to BRASS ENSEMBLE.

Slot 1 is assigned values from **0 to 16**, **Slot 2** is assigned values from **17 to 31**.



For better visibility of Articulation switches in your host, write discrete MIDI CC values (e.g. 10 for Slot 1, 26 for Slot 2) instead of continuous curves.

4.3 Using Macros for Automatic Assignments (Key Switches)

Due to its flexibility, it can take a lot of repetitive steps to set up a basic starting point for your custom configuration. This is why BRASS ENSEMBLE features macro scripts which help you with certain tasks.

Depending on whether you assign [Key](#) or [MIDI CC](#), there are different macros available.

4.3.1 Empty all Slots

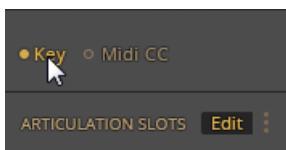
If the configuration you're about to set up is just too different from the default setup after loading an Instrument, use [Empty all slots](#) to start with a clean slate.

1. Load [Brass Ensemble.nki](#).
2. While in the default performance view, click on [Articulation](#) in the bottom left corner. The [ARTICULATION SLOTS](#) list will open.



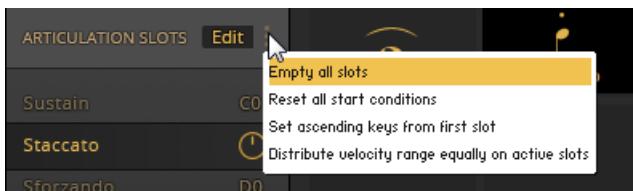
Opening the ARTICULATION SLOTS List

3. Click the [Edit](#) button.
4. Make sure [Key](#) is selected.



Key Switches Selected

5. In the top right corner of the [ARTICULATION SLOTS](#) list, click the three vertical dots. A list of available macros will open.



Opening the Articulation Macro List

6. Click on *Empty all slots*.

- All assignments are deleted.

4.3.2 Reset All Start Conditions

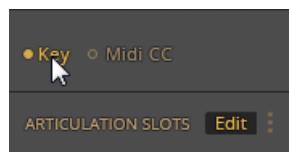
If you need to return the Instrument to its default state:

1. Load [Brass Ensemble.nki](#).
2. While in the default performance view, click on [Articulation](#) in the bottom left corner. The [ARTICULATION SLOTS](#) list will open.



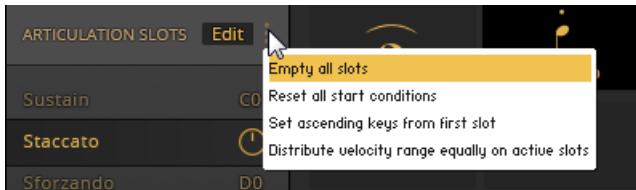
Opening the ARTICULATION SLOTS List

3. Click the [Edit](#) button.
4. Make sure [Key](#) is selected.



Key Switches Selected

5. In the top right corner of the ARTICULATION SLOTS list, click the three vertical dots. A list of available macros will open.



Opening the Articulation Macro List

6. Click on *Reset all start conditions*.
→ The Instrument's default state is loaded.

4.3.3 Set Ascending Keys From First Slot

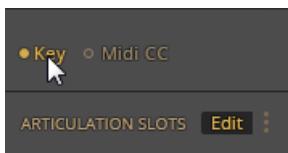
By default, MIDI Key assignments start from **C0**, ascending in semi tones. If, for example, you'd like to move all assignments up an octave to start from **C1** instead:

1. Load [Brass Ensemble.nki](#).
2. While in the default performance view, click on [Articulation](#) in the bottom left corner. The ARTICULATION SLOTS list will open.



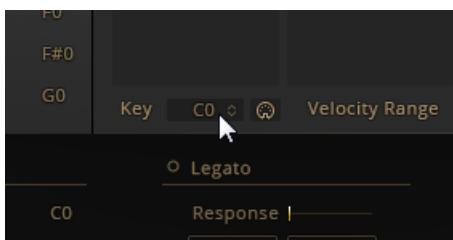
Opening the ARTICULATION SLOTS List

3. In this list, select the first Articulation slot by clicking on it.
4. Click the [Edit](#) button. The full [Articulation Slot Setup](#) view will open.
5. Make sure [Key](#) is selected.



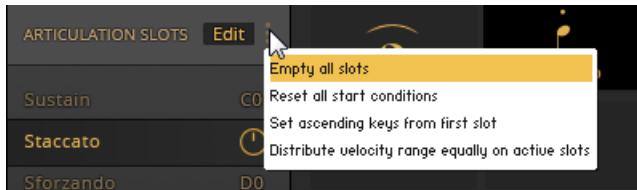
Key Switches Selected

6. Set the [Key](#) to C1 by clicking in the field next to it and dragging the mouse up.



Setting the MIDI Key

- In the top right corner of the ARTICULATION SLOTS list, click the three vertical dots. A list of available macros will open.



Opening the Articulation Macro List

- Click on *Set ascending keys from first slot*.
→ All slots are assigned the keys starting from C1.

4.3.4 Distribute Velocity Range Equally on Active Slots

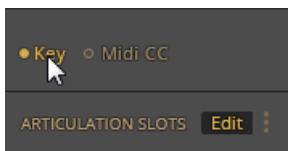
Assigning up to eight Articulations to velocity ranges of one [Key](#) is especially useful if you write automation in your host software and are running out of free Midi keys. This macro allows you to automatically assign equal shares of the 0 - 127 value range.

- Load [Brass Ensemble.nki](#).
- While in the default performance view, click on [Articulation](#) in the bottom left corner. The ARTICULATION SLOTS list will open.



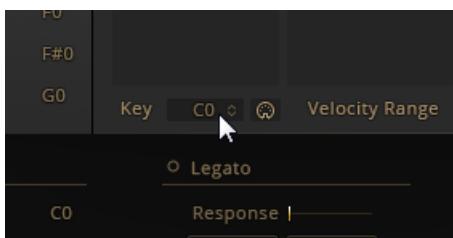
Opening the ARTICULATION SLOTS List

3. In this list, select the first Articulation slot by clicking on it.
4. Click the [Edit](#) button. The full [Articulation Slot Setup](#) view will open.
5. Make sure [Key](#) is selected.



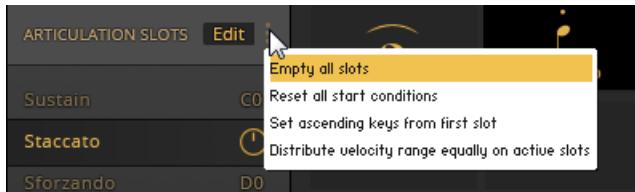
Key Switches Selected

6. Set the [Key](#) to C1 by clicking in the field next to it and dragging the mouse up.



Setting the MIDI Key

7. In the top right corner of the ARTICULATION SLOTS list, click the three vertical dots. A list of available macros will open.



Opening the Articulation Macro List

8. Click on *Distribute velocity range equally on active slots*.
 - All active slots (slots with Articulation assignments) are assigned the same C1 key switch. Each slot is assigned an equal fraction of the velocity range between 0 and 127.

4.4 Using Macros for Automatic Assignments (MIDI CCs)

Due to its flexibility, it can take a lot of repetitive steps to set up a basic starting point for your custom configuration. This is why BRASS ENSEMBLE features macro scripts which help you with certain tasks.

Depending on whether you assign **Key** or **MIDI CC**, there are different macros available.

4.4.1 Empty All Slots

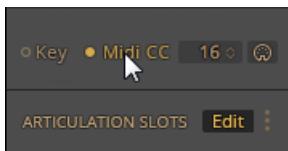
If the configuration you're about to set up is just too different from the default setup after loading an Instrument, use **Empty all slots** to start with a clean slate.

1. Load **Brass Ensemble.nki**.
2. While in the default performance view, click on **Articulation** in the bottom left corner. The **ARTICULATION SLOTS** list will open.



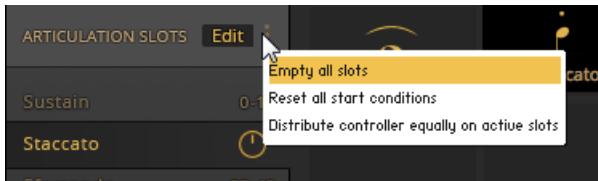
Opening the ARTICULATION SLOTS List

3. Click the [Edit](#) button.
4. Make sure [MIDI CC](#) is selected.



MIDI CC Selected

5. In the top right corner of the [ARTICULATION SLOTS](#) list, click the three vertical dots. A list of available macros will open.



Opening the Articulation Macro List (MIDI CC)

6. Click on *Empty all slots*.

- All assignments are deleted.

4.4.2 Reset All Start Conditions

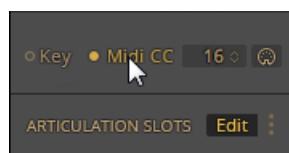
If you need to return the Instrument to its default state:

1. Load [Brass Ensemble.nki](#).
2. While in the default performance view, click on [Articulation](#) in the bottom left corner. The [ARTICULATION SLOTS](#) list will open.



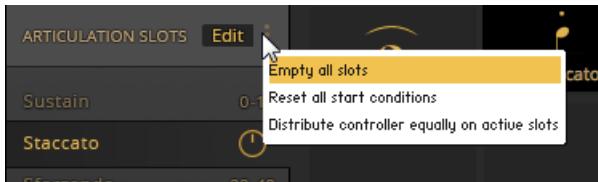
Opening the ARTICULATION SLOTS List

3. Click the [Edit](#) button.
4. Make sure [MIDI CC](#) is selected.



MIDI CC Selected

5. In the top right corner of the ARTICULATION SLOTS list, click the three vertical dots. A list of available macros will open.



Opening the Articulation Macro List (MIDI CC)

6. Click on *Reset all start conditions*.
→ The Instrument's default state is loaded.

4.4.3 Distribute Controller Equally on Active Slots

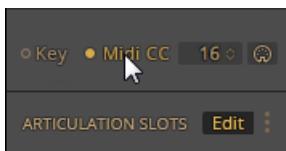
Assigning [MIDI CCs](#) to buttons or pads is a good way of avoiding conflicts in more complex MIDI controller setups.

1. Load [Brass Ensemble.nki](#).
2. While in the default performance view, click on [Articulation](#) in the bottom left corner. The ARTICULATION SLOTS list will open.



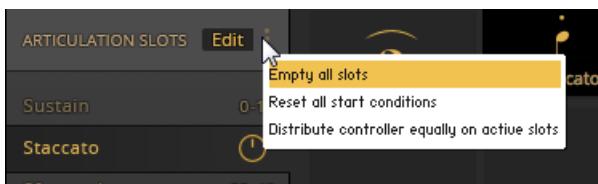
Opening the ARTICULATION SLOTS List

3. In this list, select the first Articulation slot by clicking on it.
4. Click the [Edit](#) button. The full [Articulation Slot Setup](#) view will open.
5. Make sure [MIDI CC](#) is selected.



MIDI CC Selected

6. In the top right corner of the [ARTICULATION SLOTS](#) list, click the three vertical dots. A list of available macros will open.



Opening the Articulation Macro List (MIDI CC)

7. Click on *Distribute controller equally on active slots*.
- The MIDI CC value range from 0-127 is divided by the number of active slots and distributed evenly.



If you load any of the KONTAKT Instruments included in BRASS ENSEMBLE and set it to receive MIDI CC, you'll find that the controller values are already assigned this way. This macro helps you quickly set up a new configuration if you assign less than the full eight Articulation Slots or after you cleared all assignments to start from scratch.

4.5 Key Range Setup

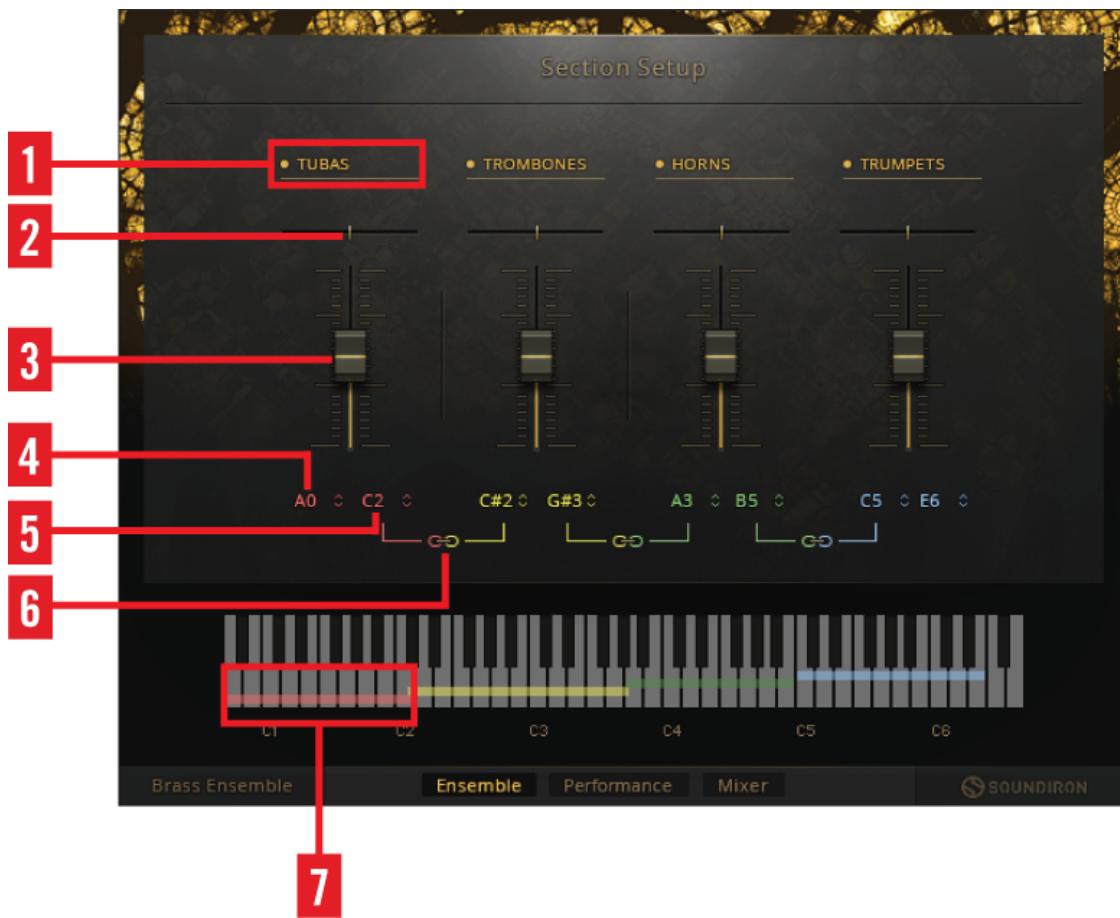
ENSEMBLE BRASS includes one KONTAKT Instrument which allows you to play all brass sections at once, although with a limited choice of Articulations.

When loading [Brass Ensemble.nki](#), the tonal range of the keyboard is split into four non-overlapping zones, or key ranges. In order to make all brass sections playable at once, each is limited to the tonal range which they are most often used for in composition. Since each section was recorded over a wider tonal range than this, you're free to change the key ranges for each of the sections, make them overlap or even de-activate sections you're not using.

4.5.1 Overview of the Ensemble View



The **Ensemble** view allows you to configure different aspects of the BrassEnsemble.nki. It is only available in this single KONTAKT Instrument.



Ensemble view

- (1) **Section on/off switch:** Click the indicator to activate or deactivate an entire section. A thin ring shows it's inactive, a solid dot means it's active.
- (2) **Section Panorama Slider:** Click and drag this slider to the left or right to set the respective section's balance in the stereo panorama.
- (3) **Section Volume Fader:** Click and drag the fader to set the respective section's level.

(4) Lower Key Range border: Click and drag up/down to set the lowest key being played back by this section.

(5) Upper Key Range border: Click and drag up/down to set the highest key being played back by this section.

(6) Section Link button: While the icon of a linked chain is visible, moving one key range's border automatically moves the adjacent border, preventing overlaps. Gaps will only occur if you move the border outside one of the instrument sections' recorded tonal range. Click the button to un-link.

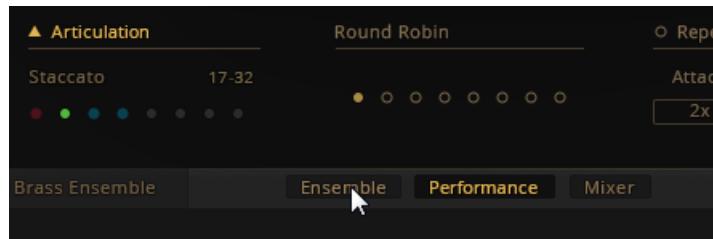
(7) Key Range Display: Each brass section's tonal range is visualized by a horizontal bar across the keyboard display.

4.5.2 Adjusting a Section's Key Range

Key ranges are visualized by horizontal bars on the keyboard and by the actual notes defining the range. Below a section's volume fader, the left note represents the lower limit, the right hand note the upper limit of the key range.

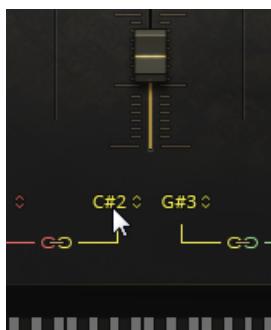
This is how you adjust the lower limit of the **TROMBONES** section:

1. Load [Brass Ensemble.nki](#).
2. While in the default performance view, click on **Ensemble** at the bottom of the screen. The **Section Setup** view will open.



Opening the Section Setup View

3. To reduce the tonal range of the **TROMBONES** section, click and drag upwards on the field reading **C#2** below the **TROMBONES** volume fader.



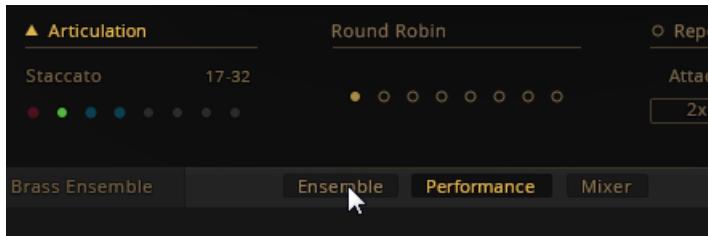
Adjusting the Key Range in the Section Setup View

- The lower limit of the **TROMBONES** section is raised. The adjacent **TUBAS** section's upper limit is raised by the same amount so the ranges don't overlap.

4.5.3 Linking/Unlinking Key Range Borders

By default, all key ranges are linked to prevent gaps or overlaps. That way, melody lines are automatically distributed across the different instrument sections. In case you need to extend a section's tonal range into the adjacent section's range, this is how you unlink them:

1. Load [Brass Ensemble.nki](#).
2. While in the default performance view, click on [Ensemble](#) at the bottom of the screen. The [Section Setup](#) view will open.



Opening the Section Setup View

3. To unlink the **TUBAS** and **TROMBONES** key ranges, click on the chain icon between them.



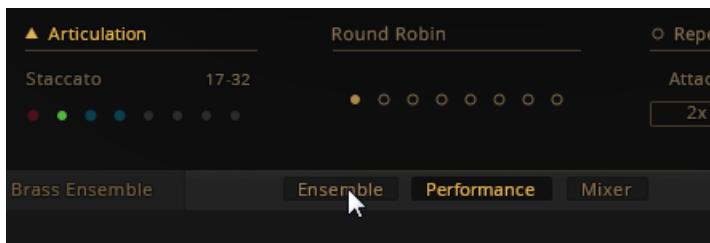
Unlocking Key Ranges

- The icon changes to a split chain and you can now adjust the ranges' borders freely.

4.5.4 Activating/Deactivating Sections

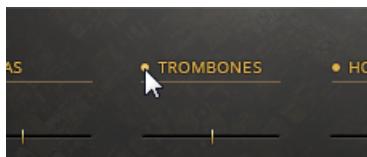
In some of your work, you might not need all sections in the Ensemble instrument. It is recommended you deactivate these sections, because whenever you unload an instrument section, the assigned samples are **automatically purged from RAM**. BRASS ENSEMBLE will automatically expand the adjacent key ranges to bridge the gap.

1. Load [Brass Ensemble.nki](#).
2. While in the default performance view, click on [Ensemble](#) at the bottom of the screen. The [Section Setup](#) view will open.



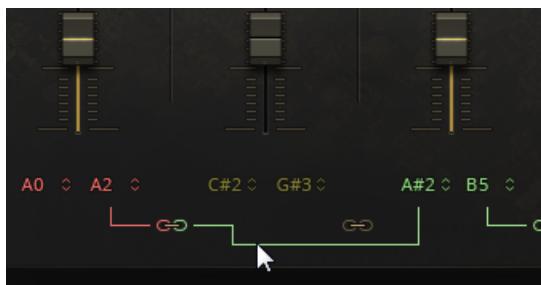
Opening the Section Setup View

3. To deactivate the [TROMBONES](#) section, click the dot to the left of the [TROMBONES](#) label. A thin ring shows it's inactive, a solid dot means it's active.



De-activating the TROMBONES Section

- The **TROMBONES** section is deactivated and the gap is closed by expanding both the **TUBAS** and the **HORNS** key ranges.



The TROMBONES Section's key range is automatically re-assigned

5 KONTAKT Snapshots

Snapshots, introduced as part of the **KONTAKT 5.4.1** update, offer a way of saving variations of any KONTAKT Instrument for easy recall.

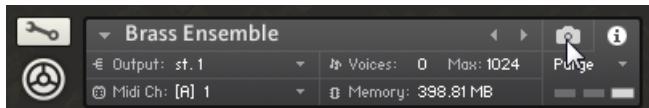
BRASS ENSEMBLE, for example, allows you to create your own mix from **CLOSE**, **MID** and **FAR** microphone positions and apply effects like **EQ**, **REVERB**, **COMP** and **FILTER**.

With KONTAKT Snapshots, you can create any number of different mixes for the same Instrument, save them in the new **.nksn** file format and re-use them in your next project or share these Snapshots across your computers. You can even share them with other users who own the same KONTAKT Library.



BRASS ENSEMBLE doesn't come with Snapshots, so in order to demonstrate the full feature set, we'll save a Snapshot first.

- ▶ Access the Snapshot View by clicking the camera icon in the Instrument Header
- ▶ Switch back to the familiar Info View with its **Input / Output** configuration options by clicking the **i** icon.



Accessing the Snapshot View

5.1 Saving a User Snapshot

Let's start exploring Snapshots with saving your own. By loading one of the supplied Instruments and adjusting some of its parameters, you will end up with a sound which is distinct enough for you to want to keep it.

Setting Up a Unique Mix

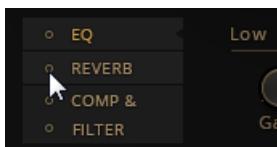
1. In the **Libraries** Tab, load the **Brass Ensemble.nki** Instrument. Play a few notes on your MIDI keyboard to get familiar with the ensemble's sound.

- In the **Mixer Tab**, activate the **CLOSE**, **MID** and **FAR** microphone positions by clicking the respective labels. De-activate the **STEREO** mix afterwards.



De-activating the STEREO mix

- Click and drag the **CLOSE** and **MID** volume faders up and the **FAR** volume fader down to set up a mix with little of the recorded ambience.
- Activate the reverb by clicking the small dot to the left of the **REVERB** label.

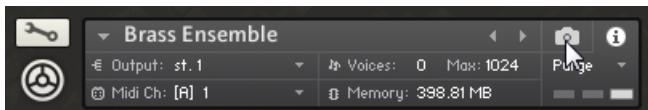


Activating the reverb effect

Saving the Mix

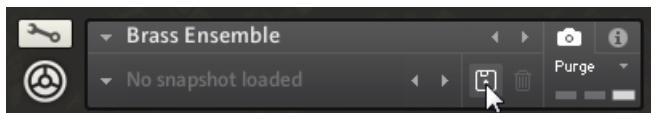
Now let's save this new sound as a Snapshot for convenience.

- Click the camera icon in the Instrument Header. This will switch the Header to the Snapshot View.



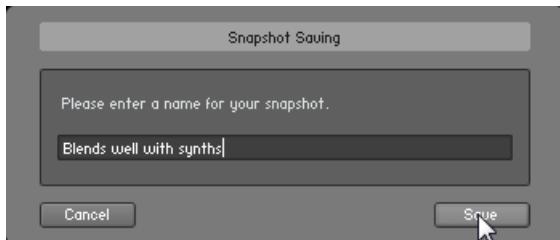
Accessing the Snapshot View

- Here, click the floppy disk icon to open the **Snapshot Saving** dialog.



Saving a Snapshot

3. Enter a Snapshot name (e.g. *Blends well with synths*) and click Save.



Snapshot Saving Dialog

- The Snapshot is saved and added to the Snapshot Menu.

All User Snapshots are automatically stored in the default User Content folder. This is where the SYMPHONY SERIES BRASS ENSEMBLE Snapshot you just created will be stored:

- **On Mac OS X:** *Macintosh HD/Users/Your Name/Documents/Native Instruments/User Content/Symphony Series Brass Ensemble/Brass Ensemble/Blends well with synths.nksn*
- **On Windows:** *C:\Users\Your Name\My Documents\Native Instruments\User Content\Symphony Series Brass Ensemble\Brass Ensemble\Blends well with synths.nksn*



You can transfer any of your Snapshots to another computer by copying the respective Snapshot files.



Please make sure you include your Documents / My Documents folder in your regular data backups.

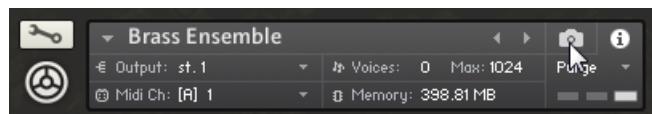
5.2 Loading a Snapshot From the Snapshot Menu

If you need to recall a specific sound for recurring use in the studio or for live playing, Snapshots give you an easy way of doing just that.

Let's get to know this feature by loading a Snapshot from the Instrument Header's Snapshot Menu. We assume here that you saved the [Blends well with synths](#) Snapshot as described in the [15.1, Saving a User Snapshot](#) section.

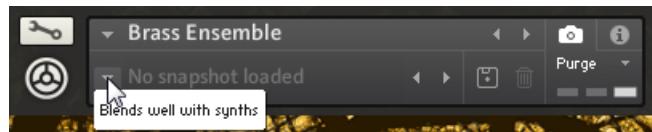
Load a User Snapshot

1. In the [Libraries](#) Tab, load the [Brass Ensemble.nki](#) Instrument. Play a few notes on your MIDI keyboard to get familiar with the ensemble's sound.
2. Click the camera icon to switch the Instrument Header to the Snapshot View. By default, no Snapshot is loaded.



Accessing the Snapshot View

3. Open the drop-down menu and select the [Blends well with synths](#) Snapshot.



Loading a Snapshot

- The [Blends well with synths](#) Snapshot is loaded.



Alternatively, when no Snapshot is loaded, click the Next Button after loading the Brass Ensemble Instrument to achieve the same result.

5.3 Loading Snapshots From the File System

KONTAKT supports two ways of loading Snapshot files (.nksn):

- Dragging and dropping a Snapshot file from the Finder / Explorer onto the Rack
- Loading via double-click in Finder (Mac OS X) or Explorer (Windows)

This allows you to take your favorite Snapshots to the studio on a flash drive or send them attached to an e-mail and load them from your Desktop without altering the installation on the studio computer.

Drag and Drop

In order to load a Snapshot from any disk, use Filer / Explorer to drag an .nksn file from its current location onto an empty area of the Rack. KONTAKT will load a new instance of the corresponding Instrument with that Snapshot.

If you drag a Snapshot onto an active Instrument in the Rack instead, that Instrument will be replaced by the Instrument loaded from the Snapshot.

Snapshots you open are not automatically saved to the default location.



Please note, the Next/Previous buttons can only skip through Snapshots located in the Factory Snapshots and the User Content folder

Double-click

Double-clicking a Snapshot file in Finder (Mac OS X) or Windows Explorer inserts a new Instrument instance in KONTAKT.

5.4 Deleting a User Snapshot

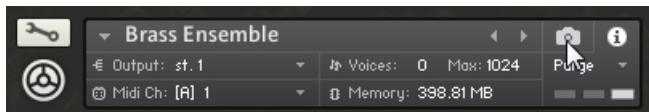
In order to keep things tidy in the Snapshot Menu, you can delete any Snapshots you saved when you feel you don't need them anymore. Keep in mind that Snapshots are saved on a per-Instrument basis. So in order to delete a Snapshot in KONTAKT, you have to load it first.



Please note, you can only delete User Snapshots. All KOMPLETE Factory Snapshots are read-only. In order to follow the steps described here, you have to have saved a Snapshot first as detailed in the [15.1, Saving a User Snapshot](#) section

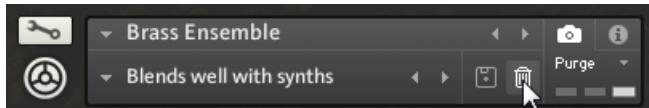
To demonstrate how deletion of Snapshots works, we'll delete the [Blends well with synths](#) Snapshot saved in that section.

1. In the [Libraries](#) Tab, load the [Brass Ensemble.nki](#) Instrument.
2. Click the Camera icon to access the Snapshot View.



Accessing the Snapshot View

3. Open the [Blends well with synths](#) Snapshot.
4. Click the trash bin icon in the Instrument Header.



Delete Snapshot Icon

5. Confirm deletion of the Snapshot in the dialog which pops up.
→ The Snapshot file is now erased from the folder on your hard disk as well as removed from the Snapshot Menu.

6 Audio Mix-down

6.1 The Microphone Mixer View

In addition to a full production-ready **STEREO** mix of all microphones used in the recording of the brass sections, BRASS ENSEMBLE offers **CLOSE**, **MID** and **FAR** microphone recordings. These are phase-aligned so mixing any combination of microphone positions will be free from phase cancellation issues.

Impulse responses capturing the ambience of the original recording are included in the **RE-VERB** panel in the **Cathedral** category.



The **STEREO** mix-down is a mixture of signals from all individual microphone positions. If you're going to activate any of the **CLOSE**, **MID** and **FAR** positions, it is recommended you deactivate the **STEREO** track.

Deactivating unnecessary microphone positions saves processing power and lowers the RAM consumption.



The Microphone Mixer

(1) Microphone Position On/Off switch: Click the indicator to activate either (combinations of) distinct microphone positions or the **STEREO** mix. A thin ring shows it's inactive, a solid dot means it's active. Either one microphone position or the **STEREO** mix has to be active at any time.

(2) Microphone Position Panorama: Click the slider and drag it to the left or right to set the respective microphone position's balance in the stereo panorama.

(3) Microphone Position Volume fader: Click and drag the fader to set the respective microphone position's level.

(4) Microphone Position Output selector: Click to select an individual output routing per microphone position. This is only available if KONTAKT is set up as a multi-out instrument or multi-out plug-in.

(5) Effects On/Off: Click any of these indicators to activate or deactivate the corresponding effect. A thin ring shows it's inactive, a solid dot means it's active.

(6) Effects Selectors: Click any of these labels to select the respective effect and show its effects parameters in a dedicated panel.

(7) Effects Controls: adjust the selected effect's parameters here.

(8) Transfer Settings drop-down: Click to save the current Mixer configuration. Then go to another BRASS ENSEMBLE Instrument and there, click the [Transfer Settings](#) drop-down to load the configuration.

6.2 Refining the Master Mix

The mix of the selected microphone positions can be processed with a number of integrated effects to help it blend better with the other instruments in your virtual orchestra.

Since the recordings have a very refined and production-ready sound, these effects aren't intended as corrective tools, but rather meant to put the finishing touches on an otherwise great mix.

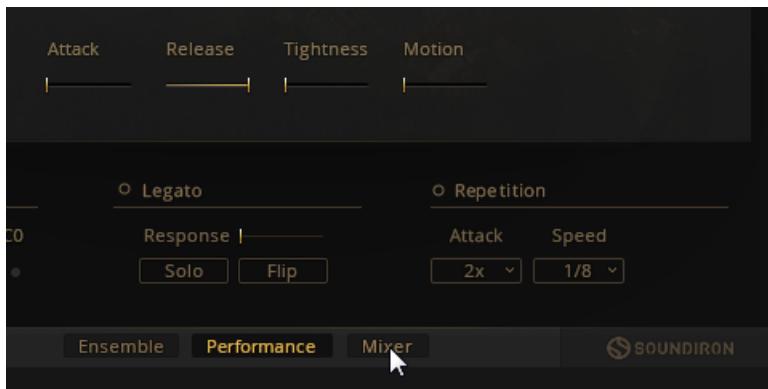


The default **STEREO** mix is recommended for most situations, because it is the most resource-efficient option. It is a mix-down of the CLOSE, MID and FAR microphone positions.

6.2.1 Applying EQ

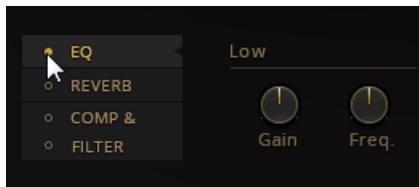
In a busy composition, instruments from different groups often overlap, resulting in a muddy, crowded mix lacking definition and transparency. Attenuating the non-essential frequencies and boosting the characteristic frequencies per instrument section helps clean up the mix.

1. Load [Brass Ensemble.nki](#).
2. Click the Mixer label to open the [Microphone Mixer](#) view.



Opening the Microphone Mixer

3. Click the **EQ** label to select the Equalizer panel.
4. Click the small indicator dot next to the label to activate / bypass the Equalizer. A thin ring shows it's inactive, a solid dot means it's active.



Activating the EQ

5. Adjust the **Low**, **Mid** and **High** controls as needed.

The EQ Controls

The EQ offers an identical parametric **Low** and **High** band with **Gain** and **Freq** controls. The **Mid** band is fully parametric with **Gain** and **Freq** controls plus adjustable **Mid** bandwidth.

Gain: Boost or attenuate the **Low** EQ band. The EQ is a bell curve type with 18 dB of boost or cut.

Freq: Set the center frequency of the **Low** EQ band anywhere between 20 Hz and 20 kHz.

BW: Set the **Mid** band's bandwidth between 1/3 octave and 3 octaves.



These controls affect the frequency balance of your KONTAKT Instrument's Master Mix. If you need to adjust EQ per instrument section, load the Individual Instruments instead of the Ensemble Instrument.

6.2.2 Applying Reverb

BRASS ENSEMBLE includes 100 Impulse Responses in 10 categories. Impulse responses in the REVERB are actual audio recordings that capture the way sounds naturally reflect and decay in different environments.

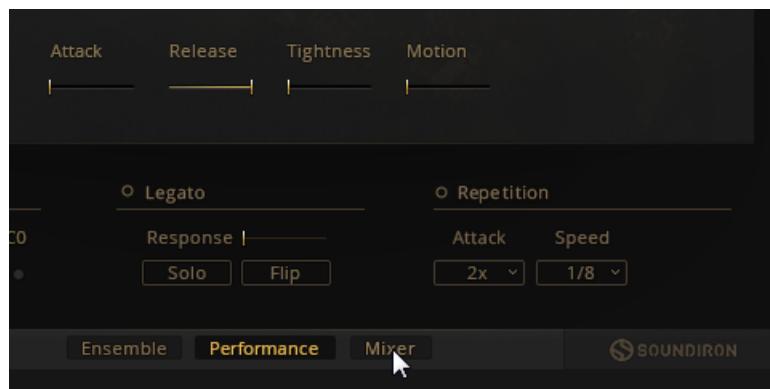
Most of these Impulse Responses were recorded by Soundiron in a variety of unique real-world locations, such as cathedrals, churches, classrooms, halls, garages, military bunkers, tunnels, studios and more. However, some Impulses are custom sound-designed sound effects used purely for creating unique special effects.



Use caution when using these Effects Impulses, as they can create strong resonant effects and feedback when mixed at high volumes in some cases.

Activating the Reverb

1. Load [Brass Ensemble.nki](#).
2. Click the Mixer label to open the [Microphone Mixer](#) view.



Opening the Microphone Mixer

3. Click the REVERB label to select the REVERB panel.

- Click the small dot next to the label to activate / bypass the REVERB.

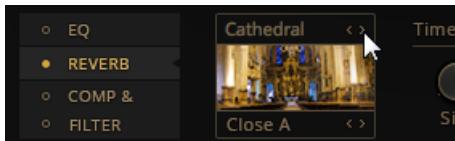


Activating the Reverb

- The REVERB is activated. A thin ring shows its inactive state, a solid dot means it's active.

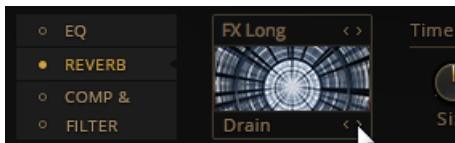
Selecting an Impulse Response

- Click the right arrow next to the **category name** above the preview image to cycle through the available categories.



Selecting a Reverb Category

- Select FX Long.
- Click the right arrow next to the **Impulse Response name** below the preview image to select the actual Impulse Response.



Selecting an Impulse Response

- Select Dragging Iron.
- The Dragging Iron Impulse Response is applied to the Master Mix in *Brass Ensemble.nki*, affecting all brass sections equally.

The REVERB Controls



Reverb parameters should not be automated. Otherwise, audio drop-outs may occur.

Size: Stretches or compresses the impulse response audio file. This creates the illusion of the room size changing.

Delay: Introduces a pre-delay before the reverberation.

- ▶ Decrease the pre-delay to embed instruments in the reverb, creating a distant, 'roomy' sound.
- ▶ Increase the pre-delay to separate instruments from reverb, creating a close, 'direct' sound.

Filter HiPass: Removes low frequencies from the reverb signal to avoid boominess.

- ▶ Click and drag up to raise the frequency below which signal is attenuated.

Filter LoPass: Removes high frequencies from the reverb signal to avoid excessive brightness and to help it blend in naturally.

- ▶ Click and drag down to lower the frequency above which signal is attenuated.

Mix Amount: Blends anywhere between no reverb at all and just the reverb.

- ▶ Click and drag down to mix in less reverb, drag up to add more reverb.

6.2.3 Applying Comp & Filter

The Compressor is helpful to reduce the dynamic range of an Instrument in case the loudest passages mask other instruments in your arrangement. The Filter can add resonance which makes the sound more aggressive and cut through the mix better, or it can reduce the brightness of an Instrument for special effect.

Activating the COMP and FILTER

1. Load [Brass Ensemble.nki](#).
2. Click the [Mixer](#) label to open the [Microphone Mixer](#) view.



Opening the Microphone Mixer

- Click the COMP & FILTER label to select the combined **Compressor** and **Filter** panel.



Opening the COMP & FILTER panel

- Click the small dot next to the COMP label to activate the Compressor.
- Click the small dot next to the FILTER label to activate the Filter.



Activating the Compressor

- The Compressor and Filter are activated. A thin ring to the left of each label shows their inactive state, a solid dot means they are active

The COMP Controls

Threshold: Sets the level above which compression occurs.

Ratio: Determines how strong the compression is. At a [Ratio](#) of **2:1**, a signal which exceeds the [Threshold](#) by **6dB** is reduced to **3dB** above the [Threshold](#).

Attack: Determines how quickly the compressor starts reducing the signal after the level exceeds the [Threshold](#).

Release: Determines how quickly the compressor stops reducing the signal after the level falls below the [Threshold](#).

The FILTER Controls

Cutoff: Sets the frequency above which signals are gradually attenuated.

Resonance: Determines the intensity of the resonance peak at the Cutoff frequency. High values cause aggressive, piercing sounds, whereas at low values, the Filter only reduces high frequency signals.

6.3 Close, Mid and Far Microphone Positions

For each brass section, a [CLOSE](#), [MID](#) and [FAR](#) position were recorded. Each of these represent a mix-down of an array of microphones to achieve a spacious, natural sound. For convenience, an additional [STEREO](#) mix-down is provided.

When using BRASS ENSEMBLE with products outside the SYMPHONY SERIES, mixing the three available microphone positions will give you greater flexibility in creating a sound which will blend well with the other products.



Every activated microphone position requires additional RAM and processing power. De-activate all positions you don't use.

About Microphone Positions

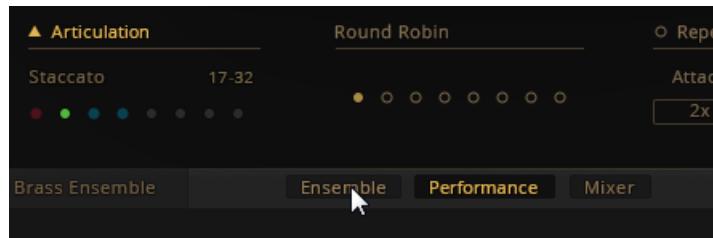
Microphone Position	Recording Distance	Stereo Width	Stereo Panning
CLOSE	5 ft. / 1.5 m	Medium	Center
MID	25 ft. / 8 m	Wide	Center
FAR	75 ft. / 23 m	Very Wide	Center

6.4 Balancing Section Volumes

The Brass Ensemble.nki is a combination of all brass sections from the individual Instruments. When working with the individual Instruments, you can adjust their relative volume and panorama position by adjusting the controls in the Individual Instruments.

Since this wouldn't otherwise be possible with the Ensemble Instrument, it offers an additional mixer in the [Section Setup](#) with per-section volume and panorama.

1. Load [Brass Ensemble.nki](#).
2. While in the default performance view, click on [Ensemble](#) at the bottom of the screen.
The [Section Setup](#) view will open.



Opening the Section Setup View

3. To adjust the [TUBAS](#) section's volume, click and drag the volume fader underneath the corresponding label.



The Section Volume Fader

- To adjust the **TUBAS** section's stereo position, click and drag the panorama slider above the volume fader.



If you create your own mix of **CLOSE**, **MID** and **FAR** microphone positions in the **Mixer** view, the Section Volume Fader settings will be applied to your mix of the microphone positions.

6.5 Balancing Articulation Volumes

Although great care has gone into balancing the perceived loudness of a section's Articulations, in context of other instrumentation and the actual composition, you may find an Articulation sounding too loud or too quiet.

Instead of having to automate the volume around this note, BRASS ENSEMBLE allows you to adjust the volume of each Articulation Slot individually. That way, you could even assign the same Articulation to multiple Slots with different volume settings.

- Load **Brass Ensemble.nki**.
- While in the default performance view, click on **Articulation** in the bottom left corner. The **ARTICULATION SLOTS** list will open.



Opening the ARTICULATION SLOTS List

3. In this list, click the [Edit](#) button. A volume knob is shown for the selected Articulation.
4. To adjust an Articulation's volume, click it once to select and then click and drag the level knob.



Adjusting a specific Articulation's Volume

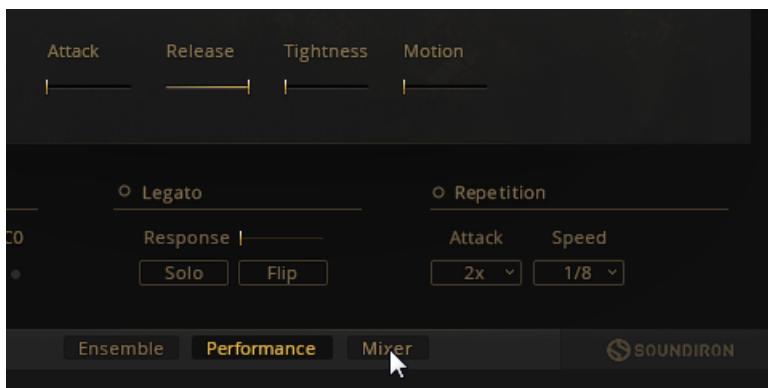
- Only the specific Articulation's volume is adjusted.

6.6 Transferring Mixer Settings Between Different Instruments

When you set up your own mix of microphone positions in one brass section, you'll want to apply the same mix to all brass sections for a consistent ensemble sound. BRASS ENSEMBLE offers an easy way of transferring these settings to the other sections.

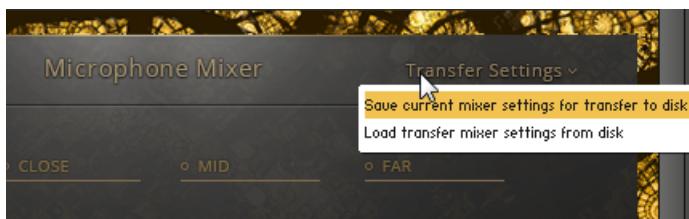
Saving Mixer Settings

1. Load [Horns Legato.nki](#).
2. While in the default performance view, click on [Mixer](#) at the bottom of the screen. The [Microphone Mixer](#) view will open.



Opening the Microphone Mixer

3. Adjust parameters in this view to create your custom mix.
4. In the top right corner, click **Transfer Settings**. A drop-down menu will open.

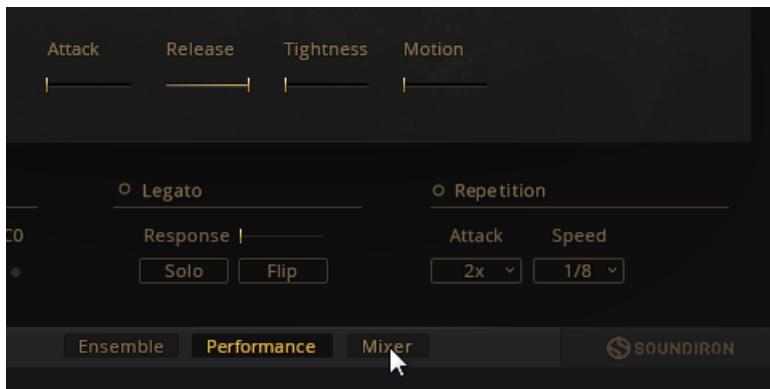


Opening the Transfer Settings drop-down

5. Select *Save current mixer setting*.

Recalling Mixer Settings

1. Load **Trumpets Legato.nki**.
2. While in the default performance view, click on **Mixer** at the bottom of the screen. The **Microphone Mixer** view will open.



Opening the Microphone Mixer

3. In the top right corner, click Transfer Settings. A drop-down menu will open.



Opening the Transfer Settings drop-down

4. Select Load mixer setting.

→ The mixer settings from the Horns section are applied to the Trumpets section.

7 Performance Optimization

Highly realistic, sampled Instruments like BRASS ENSEMBLE are demanding in terms of both RAM and processing power. Even if you own a high end computer, please read the following tips carefully to get the most out of your system.

7.1 General Advice

- Use the Section Master Instruments (e.g. [Trumpets.nki](#), [Tubas.nki](#)) as often as possible instead of the Individual Articulation Instruments.



Loading the Section Master

- Only use Individual Articulation Instruments (e.g. [Trombones Legato.nki](#), [Horns Expressions.nki](#)) if you need any of these specific features:
 - Time stretching
 - True legato
 - Effect articulations

7.2 Project Economy

- Only load Articulations which are actually used in the musical piece.



Deactivating un-used Articulations

- Try to avoid the activation of the REVERB in multiple Instruments. If possible, use your host software's Send Busses (AUX Sends, FX Sends) to share reverb between different instances of KONTAKT.



Deactivated the REVERB

7.3 Instrument Economy

- Only activate the microphone positions you actually need. STEREO will always be less demanding than mixing the CLOSE, MID and FAR positions.



Deactivated all microphone positions except for STEREO

- Disable instrument sections of the [Brass Ensemble.nki](#) Instrument if you don't need them.



Deactivated un-used sections

- In Individual Instruments, only activate time stretching ([Sync](#) / [Varispeed](#) settings) for the Articulation Slots you need control over playback speed for.



Deactivated time stretching

8 Technical Specs

8.1 Recorded Tonal Range

	Tubas	Trombones	Horns	Trumpets
Recorded Tonal Range	C1 - C5	E1 - D5	D2 - D5	E3 - C6

8.2 Microphone Positions

Microphone Position	Recording Distance	Stereo Width	Stereo Panning
CLOSE	5 ft. / 1.5 m	Medium	Center
MID	25 ft. / 8 m	Wide	Center
FAR	75 ft. / 23 m	Very Wide	Center

9 Credits

Produced By Soundiron: Mike Peaslee, Gregg Stephens and Chris Marshall

Scripting, UI and Systems Design: Chris Marshall

Editing, Mixing, Mastering: Gregg Stephens and Mike Peaslee

Instrument Programming and Mapping: Mike Peaslee, Gregg Stephens and Chris Marshall

Soundiron Beta Testers: Spencer Nunamaker, Jan Hoeglund, Cory Pelizzari, Blake Ewing, Ryan Scully, Anne van Duyvenvoorde, Danny Cocke, Brad Jenkins, Dirk Ehlert, Ryan Scully, Arkadiusz Reikowski, Ian Dorsch, Max Zhdanov, Mike Marino, Antongiulio Frulio, Simon Russell, Steve Mazzaro, Tino Danielzik, Brad Halverson, Deane Ogden, Mark Petrie, Mathieu Hallouin, Nick Pittsinger, Paul Amos, Pieter Schlosser, Sascha Knorr, Sean Beeson, Trevor Morris, Xiaotian Shi

Session Direction By: Mike Peaslee and Gregg Stephens

Session Producer: Alan Kleinschmidt

Ensemble Conductor: Sue Bohlin

Brass Consultants: Doug Morton and Geoff Chirgwin

Recording Engineers: Gregg Stephens, Mike Peaslee and Chris Marshall

Concept and Design: Frank Elting

User Interface Design: Fabian Ruf

Quality Assurance: Bymski

Artwork: Yvonne Hartmann

Finalization and Encoding: Carlos Ruiz

Product Management: Tobias Menguser, Christian Wachsmuth

10 Glossary

10.1 Sustains

Sustains are long, steady tones. They are typically used for underlying harmony and melody, to create tension, or to create a still moment.

BRASS ENSEMBLE provides multiple Sustain types, covering straight notes, tongued, trills of various intervals, as well as steps and mutes, all of which can be used to evoke a diverse range of moods and emotions.

10.2 Legatos

Legatos form a Smooth, connected flow of notes. They are employed for the creation of melodies and counter-melodies.

BRASS ENSEMBLE provides 3 velocity layers for both traditional and slurred polyphonic legato. Ensemble Trumpets and Ensemble Trombones have true, sampled slur legato and the effect is simulated for the others.

10.3 Staccatos

Staccatos are short, defined notes which can add rhythm, forward motion and definition to a passage.

BRASS ENSEMBLE provides single Staccato notes that may be played with the Repetition option for rhythmic precision and control. Some Articulations have Triple Tongue Staccato for added realism, a variety of mute types completes the Staccatos.

10.4 Expressions

Expressions can connect contrasting segments of a composition with each other by virtue of their expressiveness and are great for introducing or concluding a musical idea. They can be used for passages otherwise very difficult to sequence and for adding interest to a piece, giving the listener a greater impression of a live performance.

BRASS ENSEMBLE provides multiple Expression types, each has its own set of Articulations unique to that instrument, taking advantage of its most expressive qualities.



Playing Expressions, avoid overlapping notes. If you encounter unwanted artefacts, try adjusting the Release control.

10.5 Effects

Effects cover the aspects which add realism without contributing to the arrangement of a composition. These are often atonal and aleatoric (random), giving a sense of foreboding, but can be used for “stingers”, horror sound effects, chaos, etc.

BRASS ENSEMBLE provides dozens of effects specific to each instrument. Ranging from classic sounds heard in films and concert music, to completely aleatoric, and even warmup sound effects like valve clearing and performers tuning their instruments.